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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,583

10/23/2003

Viswanath Krishnamurthy

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EXAMINER

FRANKLIN, RICHARD B

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,583

Applicant(s)

KRISHNAMURTHY ET AL.

Examiner

Richard Franklin

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*Fritz Fleming*  
FRITZ FLEMING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
9/5/2006

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1 – 2, 4 – 8, and 10 – 19 have been examined.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1 – 2, 4 – 8, and 10 – 19 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 2, 4 – 8, 10 – 11, 13 – 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2003/0177211 (hereinafter Cyr) in view of US Patent Application Publication No. 2001/0038392 (hereinafter Humpleman), further in view of US Patent Application Publication No. 2003/0033393 (hereinafter Larson), and further in view of Microsoft Computer Dictionary Fifth Edition (hereinafter Microsoft).

As per claim 1, Cyr teaches a computer network system (Cyr; Figure 2 Item 50), comprising: a circuit board forming a backplane (Cyr; Figure 3 Item 104, Paragraph [0029] Lines 5 – 9); at least one field replaceable unit (FRU) slot located on the backplane (Cyr; Figure 3 Items 106 – 112, Paragraph [0029] Lines 5 – 9); a bus (Cyr;

Figure 2 Item 58, Paragraph [0022] Lines 7 – 10); a central resource (Cyr; Figure 2 Items 52 – 56) coupled with the FRU slot via the bus, wherein a client-ID is associated with the FRU slot (Cyr; Paragraph [0025] Lines 17 – 19); and a memory (Cyr; Figure 2 Item 92) coupled to the central resource, wherein the client-ID is stored in the memory (Cyr; Paragraph [0025] Lines 17 – 25). Cyr also obviously teaches when an FRU is connected to the FRU slot, the central resource is configured to retrieve the client-ID from the memory and provide the client-ID to the FRU. Cyr teaches this because when a client device has not been identified by an assigned geographic address (Cyr; Figure 4 Item 208 “NO”), the server identifies the geographic location of the device (Cyr; Figure 4 Item 204), and then assigns a geographic address to the device (Cyr; Figure 4 Item 206). Because of the structure of the system of Cyr, in order to perform the method above, the server must retrieve a geographic address that is stored in the IP address register (Cyr; Figure 2 Item 92) in order to assign it to the device. Therefore, the server retrieves the client ID from the memory and provides it to the client device.

Cyr does not *explicitly* teach that the central resource is configured to generate the client-ID; that the FRU is configured to download the client-ID via the bus; and that the memory is a non-volatile memory.

However, Humpleman teaches that a DHCP server (Humpleman; Figure 4A Item 306) generates a unique client-ID (Humpleman; Paragraph [0090] Lines 6 – 9) to associate with a client device (Humpleman; Figure 4A Item 302) as part of the discovery process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Cyr to include the client-ID generation because doing so allows communication with the device (Humpleman; Paragraph [0090] Lines 12 – 13).

Cyr in combination with Humpleman does not teach that the FRU is configured to download the client-ID via the bus, and that the memory is a non-volatile memory

However, Larson teaches a computer network system wherein when an FRU (Larson; Figure 3 Item 300) is connected to the FRU slot (Larson; Figures 1 and 2 Item 110), wherein the FRU is configured to download the client-ID via the bus (Larson; Paragraph [0070] Lines 11 – 15) from the central resource (Larson; Figure 3 Item 300E).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Cyr in combination with Humpleman because downloading the client-ID to the FRU is important because what was once a unique address in the system may conflict with an address in another system if the FRU is moved to the other system (Larson; Paragraph [0070] Lines 18 – 24).

Cyr in combination with Humpleman and Larson does not teach wherein the memory is a non-volatile memory.

However, Microsoft teaches the use of non-volatile memory as a memory type (Microsoft; Page 367 “nonvolatile memory”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Cyr in combination with Humpleman and Larson to include the non-volatile memory because doing so allows for the preservation of data in the memory when power is not supplied to the system (Microsoft; Page 367 "nonvolatile memory").

As per claim 2, Cyr also teaches wherein the FRU slot comprises a Compact Peripheral Component Interconnect (CPCI) slot (Cyr; Paragraph [0028] Lines 6 – 11) (Larson; Paragraph [0014] Lines 1 – 5).

As per claim 4, Cyr also teaches wherein the client-ID comprises a geographical address of said FRU slot (Cyr; Figure 4 Item 200, Paragraph [0031]).

As per claim 5, Cyr also teaches wherein the client-ID comprises a unique identifier and wherein the unique identifier prevents an FRU from clashing with other network devices (Cyr; Paragraph [0022] Lines 12 – 14).

As per claim 6, Cyr also teaches wherein the client-ID comprises a client-ID utilized by an address protocol for assigning dynamic Internet Protocol (IP) addresses (Cyr; Paragraph [0024]).

As per claim 7, Cyr also teaches wherein said address protocol comprises a Dynamic Host Configuration Protocol (DHCP) (Cyr; Paragraph [0024]).

As per claim 8, Cyr and Humpleman also teach wherein the system further comprises a plurality of FRU slots (Cyr; Figure 1 Items 106, 108, 110, and 112) configured to receive a plurality of FRUs (Cyr; Paragraph [0029] Lines 10 – 12), wherein the central resource is configured to generate a unique client-ID for each of the plurality of FRU slots (Humpleman; Paragraph [0090] Lines 17 – 19), and store each client-ID in the memory (Cyr; Figure 2 Item 92, Paragraph [0024]).

As per claim 10, Larson also teaches wherein said central resource is a service processor (Larson; Figure 5 Item 502, Paragraph [0032]).

As per claim 11, Larson also teaches wherein the FRU uses an Intelligent Platform Management Interface (IPMI) protocol to download the client-ID (Larson; Paragraph [0070] Lines 3 – 7).

As per claims 13 and 19, Cyr and Larson also teach wherein when the FRU is to be replaced by a new FRU (Cyr; Paragraph [0025]), the central resource is configured to retrieve the client-ID from the memory and provide the client-ID to the new FRU (See explanation of retrieving in rejection of claim 1), wherein the new FRU is configured to download the client-ID via the bus (Larson; Paragraph [0062] Lines 7 – 9).

As per claim 14, Cyr and Humpleman also teach the computer network system further comprising a second FRU slot located on said backplane (Cyr; Figure 3 Items 106, 108, 110, and 112) and wherein said central resource generates a second client-ID (Humpleman; Paragraph [0090] Lines 17 – 19).

As per claim 15, Humpleman also teaches wherein the client-ID is uniquely generated by said central resource for the client device and the second client-ID is uniquely generated by said central resource for the second FRU slot (Humpleman; Paragraph [0090] Lines 17 - 19).

As per claim 16, Cyr teaches a method for client-ID generation on a computer network system (Cyr; Figure 2 Item 50), comprising associating a client-ID with a field replaceable unit (FRU) slot (Cyr; Paragraph [0022] Lines 7 – 24); and storing the associated client-ID in a memory using the central resource (Cyr; Figure 2 Item 92; Paragraph [0025] Lines 17 – 25). Cyr also obviously teaches when an FRU is connected to the FRU slot, the central resource is configured to retrieve the client-ID from the memory and provide the client-ID to the FRU. Cyr teaches this because when a client device has not been identified by an assigned geographic address (Cyr; Figure 4 Item 208 “NO”), the server identifies the geographic location of the device (Cyr; Figure 4 Item 204), and then assigns a geographic address to the device (Cyr; Figure 4 Item 206). Because of the structure of the system of Cyr, in order to perform the method



above, the server must retrieve a geographic address that is stored in the IP address register (Cyr; Figure 2 Item 92) in order to assign it to the device. Therefore, the server retrieves the client ID from the memory to provide to the client device.

Cyr does not *explicitly* teach generating a client-ID via a central resource, providing the stored client-ID to an FRU via an interface, utilizing the client-ID by the FRU, and wherein the memory is a non-volatile memory.

However, Humpleman teaches that a DHCP server (Humpleman; Figure 4A Item 306) generates a unique client-ID (Humpleman; Paragraph [0090] Lines 6 – 9) to associate with a client device (Humpleman; Figure 4A Item 302).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Cyr to include the client-ID generation because doing so allows communication with the device (Humpleman; Paragraph [0090] Lines 12 – 13).

Cyr in combination with Humpleman does not teach providing the stored client-ID to an FRU via an interface, utilizing the client-ID by the FRU, and wherein the memory is a non-volatile memory.

However, Larson teaches a computer network system wherein when an FRU is connected to the FRU slot, the central resource (Larson; Figure 3 Item 300E) is configured provide the client-ID to the FRU, and the client-ID is used by the FRU (Larson; Paragraph [0070]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Cyr in combination with

Humpleman because downloading the client-ID to the FRU is important because what was once a unique address in the system may conflict with an address in another system if the FRU is moved to the other system (Larson; Paragraph [0070] Lines 18 – 24).

Cyr in combination with Humpleman and Larson does not teach wherein the memory is a non-volatile memory.

However, Microsoft teaches the use of non-volatile memory as a memory type (Microsoft; Page 367 “nonvolatile memory”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Cyr in combination with Humpleman and Larson to include the non-volatile memory because doing so allows for the preservation of data in the memory when power is not supplied to the system (Microsoft; Page 367 “nonvolatile memory”).

As per claim 17, Cyr also teaches wherein the FRU is inserted into the FRU slot associated with the client-ID (Cyr; Paragraph [0029]).

4. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2003/0177211 (hereinafter Cyr) in view of US Patent Application Publication No. 2001/0038392 (hereinafter Humpleman), futher in view of US Patent Application Publication No. 2003/0033393 (hereinafter Larson),

further in view of Microsoft Computer Dictionary Fifth Edition (hereinafter Microsoft), and further in view of US Patent No. 6,286,038 (hereinafter Reichmeyer).

As per claims 12 and 18, Cyr in combination with Humpleman, Larson, and Microsoft teach the system as described per claims 1 and 16 (See rejection of claims 1 and 16 above).

Cyr in combination with Humpleman, Larson, and Microsoft does not teach wherein the FRU utilizes the client-ID for Dynamic Host Configuration Protocol (DHCP) booting.

However, Reichmeyer teaches a client (Reichmeyer; Figure 1 Item 10) who utilizes DHCP booting in a network system (Reichmeyer; Figure 1 Item 18, Col 4 Lines 4 – 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teaching of Cyr in combination with Humpleman, Larson, and Microsoft because DHCP booting allows the client to choose a DHCP server to utilize (Reichmeyer; Col 4 Lines 4 – 30).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2181

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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9/5/2006